REMARKS

The Office Action dated February 28, 2007, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-32 are currently pending in the application, of which claims 1, 8, 15, 17, 24, and 31 are independent claims. Claims 1, 8, 15, 17, 24, and 31 have been amended to more particularly point out and distinctly claim the invention. No new matter has been added. Claims 1-32 are respectfully submitted for consideration on the basis of the enclosed Request for Continued Examination (RCE).

Claims 31-32 were not addressed in the Final Office Action. If claims 31-32 are presently in condition for allowance, indication of the allowance of claims 31-32 is respectfully requested.

Claims 1, 5-6, 8, 12-13, 15, 17, 21-22, 24, and 28-29 were again rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0065685 of Belcaid et al. ("Belcaid"). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested by Belcaid.

Claim 1, upon which claims 2-7 depend, is directed to a method including receiving a second data record to be stored on a single database. The method also includes retrieving a first integrity checksum stored with a first data record previous to the second data record. The first data record and the second data are consecutive data records in the database. The method further includes computing a second integrity

checksum for the second data record with a cryptographic method based on a storage key, the retrieved first integrity checksum and the second data record. The method additionally includes storing the second data record and the second integrity checksum on the database.

Claim 8, upon which claims 9-14 depend, is directed to a method including retrieving a second data record to be verified from a single database. The method also includes retrieving a second integrity checksum of the second data record. The method further includes retrieving a first integrity checksum of a first data record previous to the retrieved second data record. The first data record and the second data are consecutive data records in the database. The method additionally includes computing a third integrity checksum for the second data record based on the retrieved second data record, the first integrity checksum, and a storage key. The method also includes comparing the second integrity checksum to the third integrity checksum, wherein the second data record is considered authentic when the second integrity checksum and the third integrity checksums are equal.

Claim 15, upon which claim 16 depends, is directed to a system including a single database configured to store and provide signed data. The system also includes a data source configured to provide data records to be stored on the database. The system further includes a signing entity configured to sign data records to be stored on the database system with a second integrity checksum computed based on a second data record, a first integrity checksum of the first data record previous to the second data

record to be signed, and a storage key. The first data record and the second data are consecutive data records in the database. The system additionally includes a verification entity configured to verify integrity of chosen data records by computing a computed third integrity checksum based on the second data record, the first integrity checksum of the first data record previous to the second data record, and the storage key, and comparing the computed third integrity checksum to the second integrity checksum stored on the database.

Claim 17, upon which claims 18-23 depend, is directed to a computer program embodied on a computer readable medium, said computer program for storing data records on a database system in which a signing entity is used for signing data records, wherein the computer program performs a process when executed in a computer device. The process includes receiving a second data record to be stored on a single database. The process also includes retrieving a first integrity checksum stored with a first data record previous to the second data record. The first data record and the second data are consecutive data records in the database. The process further includes computing a second integrity checksum for the second data record with a cryptographic method based on a storage key, the retrieved first integrity checksum and the second data record. The process additionally includes storing the second data record and the second integrity checksum on the database.

Claim 24, upon which claims 25-30 depend is directed to a computer program embodied a computer-readable medium for verifying the integrity of data records on a

single database, wherein the computer program performs a process when executed in a computer device. The process includes retrieving a second data record to be verified from a database. The process also includes retrieving a second integrity checksum of the second data record to be verified from a database. The process further includes retrieving a first integrity checksum of a first data record previous to the retrieved second data record. The first data record and the second data are consecutive data records in the database. The process additionally includes computing a third integrity checksum for the second data record based on the retrieved second data record, the first integrity checksum, and a storage key. The process also includes comparing the second integrity checksum to the third integrity checksum, wherein the second data record is considered authentic when the second integrity checksum and the third integrity checksums are equal.

Applicants respectfully submit that Belcaid fails to disclose or suggest all of the elements of any of the presently pending claims.

Belcaid generally relates to data recovery in a distributed system. Certain embodiments of Belcaid can, for example, provide an advantage that only the data elements that differ are updated, and thus no data is transmitted in vain and the network load is minimized.

In Belcaid, a distributed system maintains data in at least two databases. The data includes at least one data element. The amount of data transmitted during data recovery is minimized by comparing (210) a first total of the data element of the data in a first

database with a second total of a corresponding data element of corresponding data in a second database. An updating procedure for the data element is initiated (213, 214) if the first total and second total are not the same.

Claim 1 recites "retrieving a first integrity checksum stored with a first data record previous to the second data record" and "computing a second integrity checksum for the second data record with a cryptographic method based on a storage key, the retrieved first integrity checksum and the second data record." Applicants respectfully submit that these features are not disclosed by Belcaid.

The Office Action took the position that these features are disclosed by Belcaid at paragraph [0025]. The Office Action took the position that the "retrieving" feature is disclosed by Belcaid's receiving, by the slave database, the checksum C of data A from the master database. The Office Action took the position that the "computing" feature is disclosed by Belcaid's calculating, by the slave database, a checksum C' for the corresponding data A'.

Applicants respectfully note that data A and data A' (nor their corresponding checksums C and C') are not related as recited in the claims. Claim 1, for example, recites "a second data record" and "a first data record previous to the second data record." Data A and data A' (nor their corresponding checksums C and C') are not related as one being previous to the other. The two are not even in the same database. In fact, they are corresponding data in a corresponding database. Accordingly, data A of Belcaid cannot correspond to the claimed "first data record previous to the second data record" because

Belcaid does not disclose an ordinal relationship between data A and data A', but rather a parallel relationship, using the word "corresponding."

The Office Action, at pages 9-10, responded to the distinction noted above. With regard to the failure of the cited art to show the claimed ordinal relationship between the data A and the data A', the Office Action responded that Belcaid discloses that the data in the two databases can be stored in the same order as one another. Applicants respectfully submit that this fact is irrelevant to the order discussed in the claims. That is to say, data A is not in any particular order with respect to element A' in Belcaid, because these two data elements are in different databases.

Nevertheless, to further clarify this issue, each of the independent claims has been amended to recite that the operations discussed refer to a "single" or "singular" database or storage means, and that that first and second data records are in a consecutive relationship with respect to one another. Accordingly, Belcaid's disclosure cannot reasonably relate to the claimed records in view of the clarification provided above.

Furthermore, in Belcaid, the slave database retrieves corresponding data A' from its memory, as the Office Action admitted at page 2, item 6. Accordingly, corresponding data A' is not "to be stored" (as recited by claim 1) but is already stored. Therefore, Belcaid cannot disclose or suggest "retrieving a first integrity checksum stored with a first data record previous to the second data record" as recited by claim 1.

The Office Action, at page 10 noted this distinction but argued that Belcaid discloses "storing of a second data element upon a comparison process implemented

upon the age of the data elements." Applicants respectfully submit that whether Belcaid discloses such a feature is moot. The ground of rejection was that A' corresponded to the claimed "second record," and A' in Belcaid is not "to be stored," and, therefore, cannot correspond to what is claimed.

Likewise, Belcaid indicates that checksum C and checksum C' are computed in "using the same rules," at paragraph [0025]. Paragraph [0024] explains that checksum C is calculated either from the data parts in data A or from the information parts in data A. Accordingly, neither checksum C nor checksum C' is computed "based on a storage key, the retrieved first integrity checksum and the second data record" as recited by claim 1. Instead, the checksums in Belcaid are calculated based only on data A (either its information parts or its data parts) or only on data A' (either its information parts or its data parts). Therefore, Belcaid cannot disclose or suggest "computing a second integrity checksum for the second data record with a cryptographic method based on a storage key, the retrieved first integrity checksum and the second data record" as recited by claim 1.

The Office Action responded to this distinction at pages 10-11. The Office Action quoted paragraph [0044] of Belcaid, but this paragraph does not appear to contradict paragraph [0025] of Belcaid, and consequently one of ordinary skill in the art would not view paragraph [0044] of Belcaid as disclosing that the checksum C or the checksum C' is "based on a storage key." Thus, Applicants respectfully disagree with the Office Action's position, and note the Office Action's response fails to address the evidence provided of the teachings of paragraph [0025] of Belcaid.

Additionally, claim 1 recites "storing the second data record and the second integrity checksum on the database." Applicants respectfully submit that this feature is also not disclosed or suggested by Belcaid.

The Office Action took the position that this feature is disclosed by Belcaid at paragraph [0032]. However, the cited paragraph indicates only that "the master database starts to update the indicated data elements to the slave database." In Belcaid, the checksum C is not part of the data elements, but is calculated therefrom. Furthermore, Belcaid requires the slave database to calculate its own checksum C' of the stored data, precisely because it cannot simply retrieve such a stored checksum. Accordingly, Applicants respectfully submit that Belcaid cannot disclose or suggest "storing the second data record and the second integrity checksum on the database" as recited by claim 1.

The Office Action, at page 11, traversed this distinction based on paragraph [0047] of Belcaid, which presents an alternative to calculating the checksums. However, if this alternative is adopted, the other portion of the rejection that relies on the calculation of the checksums must be withdrawn. Accordingly, the Office Action's reliance on the alternative presented in paragraph [0047] of Belcaid is internally inconsistent, and should be withdrawn.

Therefore, because Belcaid fails to disclose at least the features "retrieving a first integrity checksum stored with a first data record previous to the second data record," "computing a second integrity checksum for the second data record with a cryptographic

method based on a storage key, the retrieved first integrity checksum and the second data record," and "storing the second data record and the second integrity checksum on the database" it is respectfully requested that the rejection of claim 1 be withdrawn.

Claim 8, 15, 17, and 24 each have their own individual scope, but recite several similar limitations, as identified below:

- "retrieving a second integrity checksum of the second data record," "retrieving a first integrity checksum of a first data record previous to the retrieved second data record," and "computing a third integrity checksum for the second data record based on the retrieved second data record, the first integrity checksum, and a storage key" (claim 8)
- "a signing entity configured to sign data records to be stored on the database system with a second integrity checksum computed based on a second data record, a first integrity checksum of the first data record previous to the second data record to be signed, and a storage key" and "a verification entity configured to verify integrity of chosen data records by computing a computed third integrity checksum based on the second data record, the first integrity checksum of the first data record previous to the second data record, and the storage key, and comparing the computed third integrity checksum to the second integrity checksum stored on the database" (claim 15)

- "retrieving a first integrity checksum stored with a first data record previous to the second data record," "computing a second integrity checksum for the second data record with a cryptographic method based on a storage key, the retrieved first integrity checksum and the second data record," and "storing the second data record and the second integrity checksum on the database" (claim 17)
- "retrieving a second integrity checksum of the second data record to be verified from a database," "retrieving a first integrity checksum of a first data record previous to the retrieved second data record," and "computing a third integrity checksum for the second data record based on the retrieved second data record, the first integrity checksum, and a storage key" (claim 24)

Applicants respectfully submit that Belcaid also fails to disclose or suggest the above-identified features of claims 8, 15, 17, and 24.

The Office Action generally relied on the same teachings of Belcaid to disclose the above-identified features of claims 8, 15, 17, and 24. However, the Office Action additionally cited paragraph [0027] of Belcaid.

Paragraph [0027] of Belcaid does not rescue the Office Action's position. In paragraph [0027], Belcaid's slave database retrieves CS' from its own database, and then compares CS' to a retrieved CS from the master database. CS is an information part of data A, in Belcaid.

Accordingly, Belcaid is unable to disclose or suggest the above-identified features of claims 8, 15, 17, and 24, because the cited paragraph does not modify the relationship between Belcaid's master database and Belcaid's slave database from "corresponding" to "previous to" (as recited by each of claims 8, 15, 17, and 24) and because it does not disclose or suggest a different computation scheme than set forth in paragraphs [0024] of Belcaid. It is, therefore, respectfully submitted that Belcaid fails to disclose or suggest all of the elements of claims 8, 15, 17, and 24, and it is respectfully requested that the rejections of claims 8, 15, 17, and 24.

Furthermore, claims 8 and 24 specifically recite that a record is "considered authentic" under certain conditions. Belcaid does not disclose or suggest any such authentication procedure. Belcaid is concerned with data recovery, not authentication. Accordingly, Belcaid does not address whether any record is "considered authentic." Instead Belcaid is concerned with identifying whether the data in the slave database is properly synchronized with the data in the master database. Accordingly, it is respectfully submitted that Belcaid fails to disclose or suggest these further recitations of claims 8 and 24.

At page 11, the Office Action noted the above distinction and stated disagreement. Nevertheless, the gist of the Office Action's disagreement was based on simply using the word "authenticating" and "authentication" in ways that are clearly distinct from the ways in which the terms used in the present application. While limitations are not to be introduce from the specification, the claims must be read in light of the specification. In

light of the specification, one of ordinary skill in the art would view the term "considered authentic" to refer to an authentication process rather than an error correction process. In view of such a properly illumined understanding of the claims, the Office Action's analysis fails to properly identify the distinctions between the claims and the cited art.

Applicants also call to the Examiner's attention to the way in which "previous to" (as recited in the claims) is described in the present specification. As can be seen, for example, in paragraph [0024] of the present application, the term "previous to" is used in an intra-database context. Thus, paragraph [0024] cautions that "If the integrity checksum is always read from a database, a malicious database administrator may delete the last row of the database without problems, as the chain of the integrity checksums will not break." Applicants note that the claim limitations must be read in light of the specification without reading limitations from the specification into the claims.

Thus, the present specification describes, for example, a method for securing the integrity of a database. The integrity can be secured by computing an integrity checksum for each data record. The checksum of the previous data record can be used in the computation.

These distinctions were previously identified in the response filed November 20, 2006, but were not addressed in the Office Action. Accordingly, it is respectfully submitted that the rejection cannot properly be maintained, because there exist in the record unrebutted reasons for withdrawing the rejection.

A properly illuminated understanding of the terms of the claims, highlights yet another distinction between claims 1, 8, 15, 17, and 24 and Belcaid. Belcaid fails to discloses or suggest an "integrity checksum" for each data record. Belcaid is not interested in the integrity but rather the consistency of the data records. Accordingly, Belcaid has not motivation to produce an integrity checksum, although Belcaid makes use of other kinds of checksums, as discussed above.

Indeed, because Belcaid is not directed to a system or method involving integrity checksums, but rather to consistency checking between databases, Belcaid requires the presence of at least two databases, whereas the present claims do not contain any such limitation. Indeed, at least some embodiments of the present invention can exist with respect to a single database and even to one table within that database.

In Belcaid, the checksums are not integrity checksums, but rather are consistency checksums that are used to ensure that the same records in parallel databases are properly synchronized. In Belcaid, if the checksums are the same, it is understood that the underlying data is the same, and thus that slave database does not need to be updated as to that particular data record. Accordingly, it is respectfully submitted that Belcaid fails to disclose or suggest an "integrity checksum" as recited in claims 1, 8, 15, 17, and 24. It is, therefore, respectfully requested that the rejection of claims 1, 8, 15, 17, and 24 be withdrawn.

The Office Action, at page 11-12, identified this distinction and responded. However, the Office Action's response does not reasonably traverse Applicants'

argument. Indeed, the Office Action appears to admit that Belcaid does not disclose an integrity checksum for each data record. Accordingly, the rejection cannot be maintained.

The Office Action also stated, at page 12, that although the integrity checksum is not disclosed "the functional equivalent of an integrity checksum" is disclosed. However, as noted above, the function of Belcaid's checksums is nothing like that of the claimed checksums. Accordingly, the Office Action's "functional equivalent" argument is incorrect, and cannot remedy the deficiencies of Belcaid with respect to teaching the claimed checksums.

Furthermore, it is noted that in Belcaid, Figure 2, C is received, A' is retrieved, and C' is calculated. C is the checksum for A in Belcaid. A' is stored in the slave database and corresponds to A. C' is then calculated for A'. Because A and A' are the same, C and C' should be the same.

In contrast, in certain embodiments of the present invention, the consecutive checksums are not the same. Furthermore, the first data and the second data recited in the claims are not typically expected to be the same. However, even if they were the same, their integrity checksums would be different. This is because the new integrity checksum is computed based on the current data record to be stored and the previous checksum. The first data record does not have to be used in the computation at all.

Accordingly, Belcaid cannot disclose or suggest what is claimed, nor does Belcaid disclose the functional equivalent of what is claimed, and neither can Belcaid provide the critical and unobvious advantages of certain of the embodiments of the present invention.

Claims 5-6, 12-13, 21-22, and 28-29 depend respectively from, and further limit, claims 1, 8, 17, and 24. It is, therefore, respectfully submitted that each of claims 5-6, 12-13, 21-22, and 28-29 recites subject matter that is neither disclosed nor suggested in Belcaid, and it is respectfully requested that the rejection of claims 5-6, 12-13, 21-22, and 28-29 be withdrawn.

Claims 2, 9, 16, 18, and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Belcaid in view of U.S. Patent Application Publication No. 2003/0023850 of Brown et al. ("Brown"). The Office Action took the position that Belcaid discloses all of the features of the claims except those relating to public key infrastructure. The Office Action cited Brown to remedy the deficiencies of Belcaid. Applicants respectfully traverse this rejection.

Claims 2, 9, 16, 18, and 25 depend respectively from, and further limit, claims 1, 8, 15, 17, and 24. It is, thus, respectfully submitted that deficiencies of Belcaid noted above with regard to claims 1, 8, 15, 17, and 24 are also deficiencies of the combination of Belcaid and Brown as applied to claims 2, 9, 16, 18, and 25, because Brown does not remedy the above-identified deficiencies of Belcaid.

Brown generally relates to verifying messaging sessions by digital signature of participants. Accordingly, it is unsurprising that the various database-related features

with regard to which Belcaid is deficient are not addressed in any way by Brown. Accordingly, it is respectfully submitted that Brown cannot remedy the deficiencies of Belcaid.

Furthermore, the combination of Belcaid and Brown would not have been obvious to one of ordinary skill in the art. Belcaid and Brown have radically different objectives. Belcaid aims to keep a master database and a slave database consistent. Brown aims to verify messaging sessions. These two fields of art are quite unrelated, and one of ordinary skill in the art of one would not have any reason to examine the teachings of the other. That they are in different areas of technology is evidenced by their differing classifications. Belcaid is classified in 707/200 and Brown is classified in 713/176.

The Office Action responded to this distinction at page 13 of the Office Action. The Office Action argued that Brown discloses a claim feature that Belcaid does not and "therefore ... Brown is reasonably pertinent to the particular problem with which the applicant was concerned." Applicants respectfully submit that this response misses Applicants' argument.

Applicants have argued that Brown is nonalagous to Belcaid, not that the Brown is non-analogous to the present application. One of ordinary skill in the art would not have been motivated to modify Belcaid with Brown's teachings, because those two references are non-analogous to one another. Accordingly, the rejection ought to be withdrawn, because there is no reason (except for improper hindsight reconstruction, as here) that one of ordinary skill in the art would combine the references.

Furthermore, there is no discussion in Belcaid that would suggest that a storage key is necessary to accomplish the computation of Belcaid's checksum. Accordingly, one of ordinary skill in the art would not have a basis upon which to search for other keys in other areas of art, such as the keys discussed in Brown.

Accordingly, it is respectfully submitted that combination constitutes improper hindsight reconstruction. The Office Action began with the template of claims 2, 9, 16, 18, and 25 and tried to reconstruct the invention within that template. To protect against such invalid and inappropriate hindsight reconstruction, the Federal Circuit has ruled that references cannot be selected, and selected elements from selected references cannot be combined, without some suggestion, motivation, or teaching that would render obvious that selection and that combination. *See, e.g., Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1385, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001) ("In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention."); and *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding'").

The proposed combination is deficient because there is no motivation to combine. The Office Action proposed that the motivation to combine would have been "so that the

integrity of the signing entity may be verified." However, Belcaid does not include a signing entity, much less one that is in need of verification. Accordingly, Applicants respectfully submit that the proposed motivation to combine is inapplicable to the actual proposed combination. Accordingly, it is respectfully requested that this rejection be withdrawn.

The Office Action responded to the lack of motivation to combine at pages 13-14 of the Office Action with a form paragraph, but without the provision of any legal sufficient reason that one of ordinary skill in the art would have combined the references as proposed in the Office Action. Accordingly, it is clear that, as the form paragraph mentions, this rejection is not one where the combination has taken into account "only knowledge which was within the level of ordinary skill in the art" but instead is one that "include[s] knowledge gleaned only from the applicant's disclosure." Accordingly, withdrawal of the rejection ought to be made.

Claims 3, 10, 19, and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Belcaid in view of U.S. Patent No. 4,864,616 of Pond et al. ("Pond"). The Office Action took the position that Belcaid discloses all the features of the claims except "wherein the integrity checksum for a first row of a database is a generated initialization vector." The Office Action cited Pond to remedy this deficiency of Belcaid. Applicants respectfully traverse this rejection.

Claims 3, 10, 19, and 26 depend respectively from, and further limit, claims 1, 8, 17, and 24. It is, thus, respectfully submitted that deficiencies of Belcaid noted above

with regard to claims 1, 8, 17, and 24 are also deficiencies of the combination of Belcaid and Pond as applied to claims 3, 10, 19, and 26, because Pond does not remedy the above-identified deficiencies of Belcaid.

Pond generally relates to cryptographic labeling of electronically stored data. The data Pond is interested in is not database entries, but files of data, as can be seen at column 4, lines 58-66. Accordingly, it is unsurprising that the various database-related features with regard to which Belcaid is deficient are not addressed in any way by Pond. Accordingly, it is respectfully submitted that Pond cannot remedy the deficiencies of Belcaid. Thus, it is respectfully requested that the rejection of claims 3, 10, 19, and 26 be withdrawn.

Furthermore it would not have been obvious to combine the teachings of Pond and Belcaid. As explained above, in order to prevent inappropriate hindsight reconstruction, the Federal Circuit requires there be motivation in the prior art to make the combination. This suggestion test requires the Office Action to explain why one of ordinary skill in the art would be motivated to combine the references.

The Office Action took the position that the combination would have been motivated by the possibility of using an initialization vector in the computation of a second integrity checksum, where there is no previous integrity checksum available. Applicants respectfully disagree.

Belcaid's system does not require the use of a previous integrity checksum in its calculation of its checksum C. Accordingly, one of ordinary skill in the art considering

how to improve Belcaid would not care whether or not a previous integrity checksum was available, and would not turn to Pond to provide the necessary features. Accordingly, it is respectfully submitted that there is no motivation to make the proposed combination. Therefore, for this additional reason, it is respectfully requested that the rejection of claims 3, 10, 19, and 26 be withdrawn.

The Office Action responded to this distinction at page 14. The Office Action disagreed that Belcaid's system does not require the use of a previous integrity checksum in its calculation of its checksum C. However, the Office Action's disagreement is not supported by evidence, and is plainly contrary to the evidence, such as the evidence of paragraph [0025] of Belcaid. Accordingly, the Office Action's response fails to revive the rejection, and the rejection should be withdrawn.

Claims 4, 11, 20, and 27 were rejected 35 U.S.C. 103(a) as being unpatentable over Belcaid in view of allegedly admitted prior art, contained in the specification of the present application. Applicants respectfully submit that this rejection contains legal error, inasmuch as the combination of Belcaid with the disclosure of the present application constitutes legally impermissible hindsight reconstruction, because there is no motivation, teaching, or suggestion in the prior art to make the combination. The Office Action does not even attempt to provide motivation to combine, and it is well established that motivation to combine may not be gleaned from Applicants' disclosure. It is, therefore, respectfully requested that this rejection be withdrawn.

The Office Action identified this distinction at pages 14-15. The Office Action, however, did not provide any meaningful further reply, but simply redirected the reader to the "aforementioned reasons" after quoting a form paragraph. The "aforementioned reasons" do not address the errors of the rejection of claims 4, 11, 20, and 27, and thus, the rejection should be withdrawn as legally unsupported.

Claims 7, 14, 23, and 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Belcaid in view of U.S. Patent No. 6,557,044 of Cain ("Cain"). The Office Action took the position that Belcaid discloses all of the elements of the claims except "wherein the integrity checksums comprises a running sequence number." The Office Action cited Cain to remedy this deficiency of Belcaid. Applicants respectfully traverse this rejection.

Claims 7, 14, 23, and 30 depend respectively from, and further limit, claims 1, 8, 17, and 24. It is, thus, respectfully submitted that deficiencies of Belcaid noted above with regard to claims 7, 14, 23, and 30 are also deficiencies of the combination of Belcaid and Cain as applied to claims 3, 10, 19, and 26, because Cain does not remedy the above-identified deficiencies of Belcaid.

Cain generally relates to a method and apparatus for exchange of routing database information. In Cain, a routing database is maintained including checksums that are used to identify changes in routes. Accordingly, it is unsurprising that the various database-related features with regard to which Belcaid is deficient are not addressed in any way by Cain. Accordingly, it is respectfully submitted that Cain cannot remedy the deficiencies

of Belcaid. Thus, it is respectfully requested that the rejection of claims 7, 14, 23, and 30 be withdrawn.

Furthermore it would not have been obvious to combine the teachings of Cain and Belcaid. As explained above, in order to prevent inappropriate hindsight reconstruction, the Federal Circuit requires there be motivation in the prior art to make the combination. This suggestion test requires the Office Action to explain why one of ordinary skill in the art would be motivated to combine the references.

Applicants respectfully submit that this rejection contains legal error, inasmuch as the combination of Belcaid with the disclosure of the present application constitutes legally impermissible hindsight reconstruction, because there is no motivation, teaching, or suggestion in the prior art to make the combination. The Office Action does not even attempt to provide motivation to combine, and it is well established that motivation to combine may not be gleaned from Applicants' disclosure. It is, therefore, respectfully requested that this rejection be withdrawn.

The above-identified distinction was noted in the Office Action at pages 15-16, but again the Office Action simply quoted the form paragraph and appended reference to the "aforementioned reasons." Since the "aforementioned reasons" cannot possibly respond to the lack of motivation to combine Belcaid and Cain, this rejection should be withdrawn as clearly unsupported and improper.

The many above-identified deficiencies of the cited references may be moot in view of the amendments to the claims, particularly with respect to the feature "wherein

the first data record and the second data record are consecutive data records in the database." In applied art, the first record and second record are parallel records in two different databases, rather than being consecutive to one another and in the same database. Accordingly, the applied art is clearly non-analogous to what is claimed, and it is respectfully submitted that the presently pending claims are neither anticipated nor rendered obvious by the applied art.

More particularly, Belcaid's first and second data records cannot be considered to be in the same database, because one is one database and the other is another database. Furthermore, even if they were to be viewed as being in the same database on the theory that the slave database is the same as the master database, they would not be consecutive but rather identical. Accordingly, Belcaid's A and A' cannot possibly correspond to the claimed first and second data records.

Furthermore, because Belcaid is dealing with non-analogous data records, one of ordinary skill in the art would not view Belcaid as analogous art to the present application, and one of ordinary skill in the art would not have been motivated to modify the disclosure of Belcaid such that the resultant system was such as is claimed in any of the presently pending claims.

For the reasons explained above, it is respectfully submitted that each of claims 1-32 recites subject matter that is neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that all of claims 1-32 be allowed, and that this application be passed to issue.

If, for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

Peter Flanagan
Registration No. 58,178

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

PCF:cmc

Enclosures: Request for Continued Examination (RCE)
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